

Amendment to the Claims:

This listing of claims will replace all prior version and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of processing a workpiece, the method comprising the steps of:

applying a liquid adhesive to a work carrier,

wherein the work carrier comprises a porous material including a plurality of pores at least a portion of which are interconnected, wherein a portion of the plurality of pores include pore passages that comprise at least 10% of the pore volume, and wherein the pore passages traverse the porous material from a top side to a backside of the work carrier;

applying a vacuum pressure to the work carrier,

wherein the plurality of pores accommodate a portion of the liquefied solid upon application of the vacuum pressure to the work carrier;

placing the workpiece in intimate contact with the liquefied adhesive;

hardening the liquefied adhesive while maintaining the vacuum pressure to form a solid adhesive and to secure the workpiece to the work carrier,

wherein the vacuum pressure is maintained until the solid adhesive is formed or only during an initial hardening phase of the liquefied adhesive;

processing the workpiece while holding the workpiece on the work carrier; and

applying a solvent through the plurality of pores to dissolve the solid adhesive and to release the workpiece from the work carrier.

2. (Previously presented) The method as claimed in claim 1, wherein the work carrier comprises a gas-permeable work carrier.

3. (Previously presented) The method as claimed in claim 1, wherein the solid functions to separate the workpiece and the work carrier.

4. (Cancelled)

5. (Previously presented) The method as claimed in claim 1, wherein the porous material comprises a ceramic, a glass, a glass ceramic, a metal, a sintered metal, a metal ceramic or a sintered material.

6. (Previously presented) The method as claimed in claim 1, wherein processing the workpiece comprises thinning the workpiece on the work carrier.

7. (Previously presented) The method as claimed in claim 1, wherein the liquefied adhesive comprises a material selected from a group consisting of: wax, an epoxy resin, a plastic material, or adhesive on a double-sided adhesive tape.

8. (Previously presented) The method as claimed in claim 1, wherein the workpiece contains a semiconductor material.

9. (Previously presented) The method as claimed in claim 1, wherein the liquid adhesive fills at least a portion of an intermediate space between the workpiece and the work carrier.

10. (Currently amended) A work carrier for processing a workpiece, said work carrier comprising a porous material including a plurality of pores at least a portion of which are interconnected, wherein a portion of the plurality of pores include pore passages that comprise at least 10% of the pore volume, and wherein the pore passages traverse the work carrier from a top side to a rear side of the work carrier, and wherein the plurality of pores are configured to accommodate a portion of a liquefied adhesive upon application of vacuum pressure to the work carrier, the liquefied adhesive configured with a workpiece in intimate contact therewith, and to accommodate the liquefied adhesive upon

hardening to a solid adhesive, and to provide for flow of a solvent therethrough to dissolve the solid adhesive, wherein the liquefied adhesive is configured to harden under continuous vacuum pressure or under vacuum pressure applied only during an initial hardening phase.

11. (Currently amended) In combination, a work carrier and workpiece, the combination comprising:

a porous material including a plurality of pores at least a portion of which are interconnected, wherein a portion of the plurality of pores include pore passages that comprise at least 10% of the pore volume, and wherein the pore passages traverse the work carrier from a top side to a rear side of the work carrier;

wherein the workpiece comprises a semiconductor wafer attached to the workcarrier by an adhesive, wherein the diameter of the work carrier is substantially equal to the diameter of the semiconductor wafer,

wherein, upon application of vacuum pressure to the work carrier, the plurality of pores are configured to accommodate a portion of the adhesive in a liquid state, and to accommodate the liquefied adhesive upon hardening of the adhesive to a solid,

wherein the liquefied adhesive is configured to harden under continuous vacuum pressure or under vacuum pressure applied only during an initial hardening phase, and

wherein the plurality of pores are further configured to provide for flow of a solvent therethrough to dissolve the solid adhesive and release the semiconductor wafer.

12. (Cancelled)

13. (Cancelled)

14. (Previously presented) The method of claim 1 wherein, applying a solvent to release the workpiece from the work carrier comprises penetrating the solvent into passages from a pore or from the plurality of pores through the work carrier up to the liquefied solid.

15. (Previously presented) The method of claim 1, wherein releasing the workpiece from the work carrier further comprises releasing the workpiece by generating a positive pressure on a backside of the work carrier.

16. (Previously presented) The method as claimed in claim 1, wherein the porous material comprises a porous material having average pore size of between 20 μ m and 500 μ m, and a porosity of between 20% and 50%.

17. (Previously presented) The method as claimed in claim 1, wherein the porous material comprises a porous material having an open porosity of between 10% and 60%.

18. (Cancelled)

19. (Previously presented) The method as claimed in claim 1, wherein the porous material comprises a ceramic material manufactured according to one of German Institute Standard DIN 51056, 1985 or European Standard 623-2, 1992, and wherein the pores are arranged irregularly.

20. (Previously presented) The method as claimed in claim 1, wherein the porous material comprises a porous material having an average pore size ranging from 50 μ m to 100 μ m.

21. (Previously presented) The method as claimed in claim 1, wherein the porous material comprises a porous material having an open porosity of between 20% and 50%.

22. (Previously presented) The work carrier as claimed in claim 10, wherein the plurality of pores comprise a branched pore network within the work carrier.

23. (Cancelled)

24. (New) The method as claimed in claim 1, wherein the diameter of the work carrier is substantially equal to the diameter of the workpiece.

25. (New) The method as claimed in claim 1, wherein a perimeter configuration of the work carrier is substantially the same as a perimeter configuration of the work piece.

26. (New) The method as claimed in claim 1, wherein the workpiece comprises a semiconductor wafer having a flat section on a perimeter thereof, and wherein a perimeter of the work carrier has a corresponding flat section.